

Remarks

Claims 1-6 are pending in the subject application. Applicants acknowledge that claim 3 has been withdrawn from further consideration as being drawn to a non-elected invention. By this Amendment, Applicants have canceled claims 2, 3, and 5, amended claims 1 and 4, and added new claims 19-24. Support for the amendments and new claims can be found throughout the subject specification and in the claims as originally filed. Applicants have also amended Tables 1, 2, and 3, at pages 29-60 of the subject specification to correct typographical errors and accession numbers therein. Entry and consideration of the amendments presented herein is respectfully requested. Accordingly, claims 1, 4, 6, and 19-24 are currently before the Examiner. Favorable consideration of the pending claims is respectfully requested.

As an initial matter, the Examiner indicates that claim 1 is objected to for the use of the term “screening for”. Applicants have amended claim 1 in accordance with the Examiner’s suggestion. Accordingly, reconsideration and withdrawal of the objection is respectfully requested.

Claims 1 and 2 are rejected under 35 USC §102(b) as anticipated by Smyth *et al.* (1995). The examiner asserts that the Smyth *et al.* reference discloses a method of determining large granular lymphocyte (LGL) leukemia by detecting the expression of granzyme B. Applicants respectfully traverse this rejection.

Applicants respectfully assert that the Smyth *et al.* reference does not anticipate the claimed invention. The Smyth *et al.* reference only discloses differences in expression of granzymes in normal LGL cells versus normal high-density small lymphocytes (HDL) cells. The Smyth *et al.* reference does not disclose screening for LGL leukemia by detecting upregulated expression of granzyme genes (or expression of any other genes) in leukemic LGL cells. Only the subject application discloses that the genes or gene products recited in claim 1 exhibit upregulated expression in leukemic LGL cells. There is no teaching or suggestion in the Smyth *et al.* reference that leukemic LGL cells exhibit upregulated expression of granzyme genes. As the Examiner is aware, in order to anticipate, a single reference must disclose within the four corners of the document each and every element and limitation contained in the rejected claim. *Scripps Clinic & Research Foundation v. Genentech Inc.*, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). The Smyth *et al.* reference does not teach or suggest screening or detecting upregulated expression of genes or gene products in

leukemic LGL cells and, therefore, Applicants respectfully assert that the reference does not anticipate the claimed invention. Accordingly, reconsideration and withdrawal of the rejection under 35 USC §102(b) is respectfully requested.

Claims 1 and 4-6 are rejected under 35 USC §103(a) as obvious over Warrington *et al.* (U.S. published application No. 2001/0044104) in view of Robertson *et al.* (1996) and Lamy *et al.* (1998). The Examiner asserts that it would have been obvious to screen for LGL leukemia given the Warrington *et al.* publication (which is cited as teaching screening of, for example, acute lymphocytic leukemia using a gene expression profile) in view of the Robertson *et al.* and Lamy *et al.* references (which are cited as teaching expression of certain genes in LGL leukemic cells). Applicants respectfully traverse this grounds of rejection.

As an initial matter, Applicants note that they have amended claim 1 to recite the Markush group of upregulated genes or gene products of claim 2. Applicants note that claim 2 was not included under this rejection; therefore, amending claim 1 to incorporate the elements of claim 2 obviates the rejection of the claims.

Applicants respectfully assert that the cited references, whether taken alone or in combination, do not teach or suggest the claimed invention. The Warrington *et al.* publication may teach methods for screening for diseases by analyzing differential gene expression. However, as the Examiner acknowledges in the Office Action, the cited publication does not teach or suggest gene expression profiling for LGL leukemia. Nor does the Warrington *et al.* publication teach or suggest differential gene expression profiles using any of the genes or gene products recited in Applicants' claimed invention.

The secondary references cited by the Examiner, Robertson *et al.* (1996) and Lamy *et al.* (1998), do not overcome the failings of the Warrington *et al.* reference. The Robertson *et al.* reference discloses expression patterns in leukemic LGL cells of several clusters of differentiation (CD) antigens. The Lamy *et al.* reference discloses expression patterns in leukemic LGL cells of CD95, CD95L and CD57 antigens. However, neither the Robertson *et al.* nor the Lamy *et al.* teach or suggest screening or detecting LGL leukemia using the gene or gene products recited in amended claim 1. Accordingly, reconsideration and withdrawal of the rejection under 35 USC §103(a) is respectfully requested.

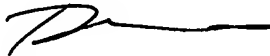
It should be understood that the amendments presented herein have been made solely to expedite prosecution of the subject application to completion and should not be construed as an indication of Applicants' agreement with or acquiescence in the Examiner's position.

In view of the foregoing remarks and amendments to the claims, Applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

Applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



Doran R. Pace
Patent Attorney
Registration No. 38,261
Phone No.: 352-375-8100
Fax No.: 352-372-5800
Address: P.O. Box 142950
Gainesville, FL 32614-2950

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Enclosure: Marked up version of specification pages 29 - 66